Review for Blitz on Light

This is a very comprehensive exam. You must practice well. The biggest danger is The Third Quarter Sluff Off! You must be able to solve the following types of problems: Inverse square law, intensity and illumination (finding the intensity of an unknown light), speed of light to measure distances, mirror & lens calculations (distances & sizes of images), Index of Refraction, Snell's Law.

There is a practice exam on your Blitz Program.

You must be able to define, explain, and use the following terms:

candela lumen intensity Snell's Law Index of Refraction lunar eclipse solar eclipse umbra penumbra phases of the moon seasons angle of incidence angle of reflection angle of refraction tilt of earth & seasons line spectra refraction elements in the stars composition of stars doppler effect on light speed of stars	interference of light constructive destructive evidences of wave theory of light evidences of particle theory of light electromagnetic spectrum vectors of light waves Huygens' theory of light Newton's theory of light Maxwell's theory of light Maxwell's Equations show... cause of colour of light primary colours of light primary colours of pigment complementary colours additive & subtractive colours	red sunsets & sunrises blue sky annular eclipse of sun diffraction rectilinear propagation a glory cirrus clouds primary rainbow secondary rainbow mirage soap bubble diffraction oil slick diffraction vectors of light waves photoelectric effect Galileo's measure of "c" Fizeau's measurement of "c" Roemer's measure of "c" Michelson's measure of "c" Crookes Radiometer	light exerts pressure comets' tails the Quantum Theory Max Planck's theory polarization of light intensity of light illumination luminous illuminated translucent opaque temp vs. intensity black-body radiation "c" in vacuum in m/s reflection law spherical mirror parabolic mirror spherical aberration chromatic aberration	compare spectra frequencies compare spectra wavelengths dispersion of light why can light be polarized? what spectra tell us about stars doppler effect on stars double slit experiment spectroscope types of telescopes binoculars photons parts of electromagnetic waves compare energies of colors discrete energy levels electron energy chart plasma images from lenses images from mirrors real image virtual image